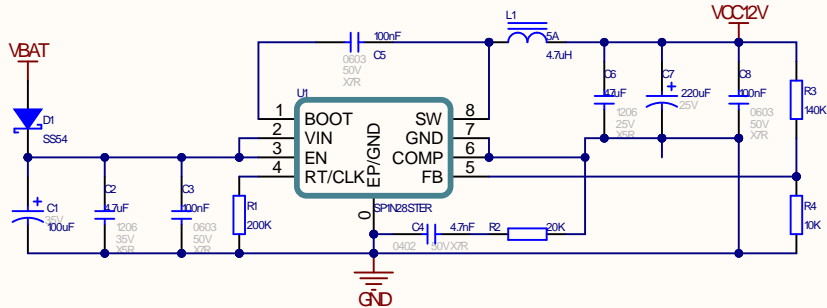
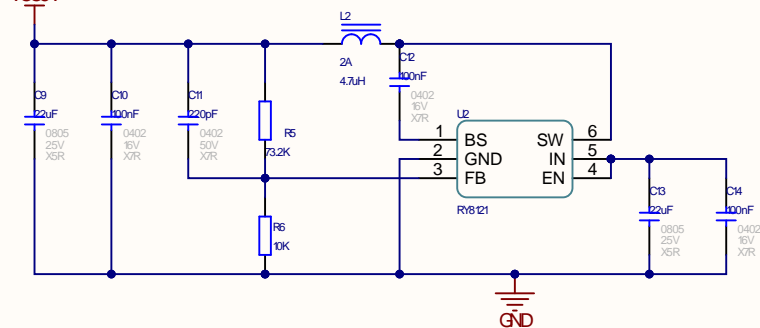


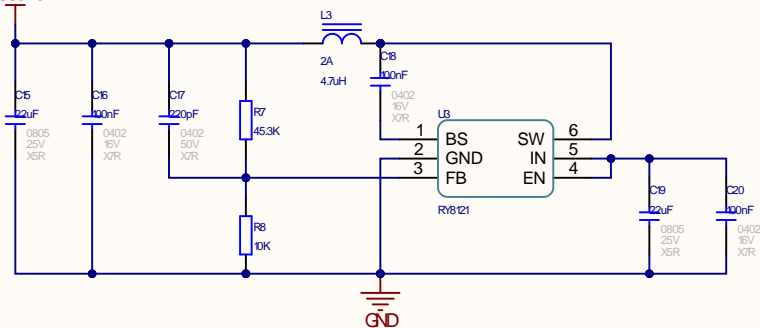
12V电源



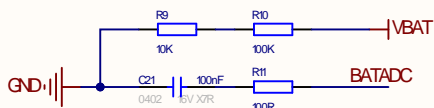
5V电源



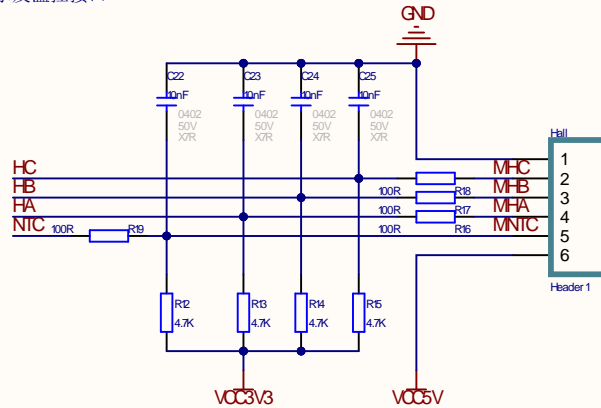
3V3电源



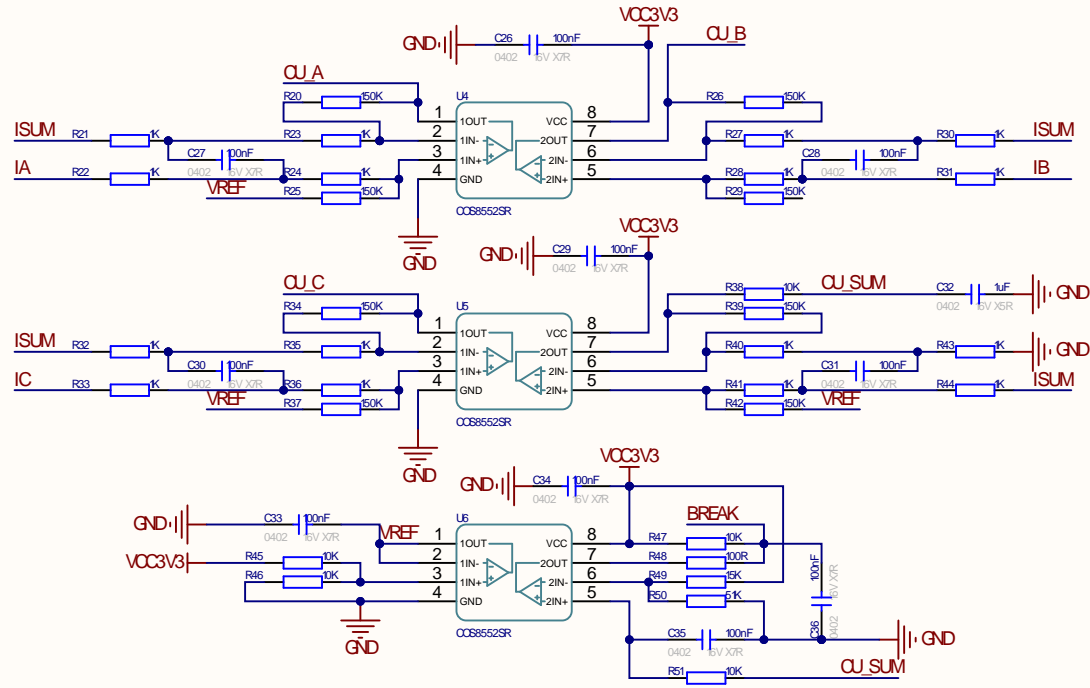
电池电压检测



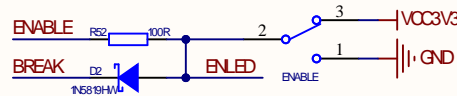
霍尔及温控接口



电流放大



使能开关



Title

猎户座-无刷驱动板

Size

A4

Number

2

Revision

1.0

Date: 6/26/2023

Sheet of 1/2

File: D:\AltiumDesigner\驱动_1.SchDoc

Drawn By: Pixel

Comment	Description	Designator	Footprint	LibRef	Quantity
翠绿贴片LED	翠绿贴片LED	3V3, 5V, 12V, RUN	LEDC1608(0603)-L	LED Chip Green	4
100uF 35V 铝电解	贴片电解电容 100uF 35V 6.3x7.7	C1	CAP-E-S 6.3	E-S 100uF 35V 6.3x7.7	1
4.7uF 35V X5R	贴片瓷片电容; MLCC: 1206(3216);	C2	CAPC3216(1206)S	4.7uF 1206 35V X5R	1
100nF 50V X7R	贴片瓷片电容; MLCC: 0603(1608);	C3, C5, C8	CAPC1608(0603)S-N	100nF 0603 50V X7R	3
4.7nF 50V X7R	贴片瓷片电容; MLCC: 0402(1005);	C4	CAPC1005(0402)S-N	4.7nF 0402 50V X7R	1
47uF 25V X5R	贴片瓷片电容; MLCC: 1206(3216);	C6	CAPC3216(1206)S	47uF 1206 25V X5R	1
220uF 25V 铝电解	贴片电解电容 220uF 25V 6.3x7.7	C7	CAP-E-S 6.3	E-S 220uF 25V 6.3x7.7	1
22uF 25V X5R	贴片瓷片电容; MLCC: 0805(2012);	C9, C13, C15, C19, C41, C43, C45	CAPC2012(0805)S-N	22uF 0805 25V X5R	7
100nF 16V X7R	贴片瓷片电容; MLCC: 0402(1005);	C10, C12, C14, C16, C18, C20, C21, C26, C27, C28, C29, C30, C31, C33, C34, C35, C36	CAPC1005(0402)S-N	100nF 0402 16V X7R	17
220pF 50V X7R	贴片瓷片电容; MLCC: 0402(1005);	C11, C17	CAPC1005(0402)S-N	220pF 0402 50V X7R	2
10nF 50V X7R	贴片瓷片电容; MLCC: 0402(1005);	C22, C23, C24, C25	CAPC1005(0402)S-N	10nF 0402 50V X7R	4
1uF 16V X5R	贴片瓷片电容; MLCC: 0402(1005);	C32	CAPC1005(0402)S-N	1uF 0402 16V X5R	1
470uF 35V 聚合物固态	直插固态电容 470uF 35V 8x14	C37, C38, C39	Cap-S-D 3.5-8x14	S-D 470uF 35V 8x14	3
10uF 25V X5R	贴片瓷片电容; MLCC: 0805(2012);	C40, C42, C44	CAPC2012(0805)S-N	10uF 0805 25V X5R	3
Header 3	Header, 6-Pin	C11	ZH1.5-6P-SH	Header 6	1
SS54	SS54 肖特基二极管	D1	SMA-L(DO-.214AC)	SS54	1
1N5819HW	1N5819HW 肖特基二极管	D2, D6, D7, D8	SOD-123-L	1N5819HW	4
SMDJ26CA	TRANSIENT VOLTAGE SUPPRESSOR DIODE	D3, D4, D5	SMC(DO-.214AB)-BI	Diode TVS BI-Dlr	3
KF/WJ/DG 30x connector	接线端子 2Pin	DCIN	KF/WJ/DG 301-2p-5.0mm	KF/WJ/DG 30x	1
蓝色贴片LED	蓝色贴片LED	EN	LEDC1608(0603)-L	LED Chip Blue	1
SW-SPDT	单刀双掷开关 3脚船型、钮子、拨动开关 SPDT Subminiature Toggle Switch	ENABLE	SS12D10	SW-SPDT	1
黄色贴片LED	黄色贴片LED	ERR	LEDC1608(0603)-L	LED Chip Yellow	1
Header 2	Header, 6-Pin	FeedBack	ZH1.5-6P-SH	Header 6	1
Header 1	Header, 6-Pin	Hall	ZH1.5-6P-SH	Header 6	1
4.7uH 5A	功率电感	L1	SLO2520	Ind-Power	1
4.7uH 2A	功率电感	L2, L3	SLO2520	Ind-Power	2
KF/WJ/DG 30x connector	接线端子 3Pin	P2	KF/WJ/DG 301-3p-5.0mm	KF/WJ/DG 30x-3P	1
BSC014N04LS	英飞凌 N沟 MOS	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12	TDSON-8	BSC014N04LS	12
200K ±1%	贴片电阻	R1	RESC1005(0402)S-N	Res-Chip_10	1
20K ±1%	贴片电阻	R2, R53	RESC1005(0402)S-N	Res-Chip_7	2
140K ±1%	贴片电阻	R3	RESC1005(0402)S-N	Res-Chip_11	1
10K ±1%	贴片电阻	R4, R6, R8, R9, R38, R45, R46, R47, R51, R60, R62, R64, R66, R68, R70, R72, R74, R76, R78, R80, R82	RESC1005(0402)S-N	Res-Chip_1	21
73.2K ±1%	贴片电阻	R5	RESC1005(0402)S-N	Res-Chip_8	1
45.3K ±1%	贴片电阻	R7	RESC1005(0402)S-N	Res-Chip_12	1
100K ±1%	贴片电阻	R10	RESC1005(0402)S-N	Res-Chip_9	1
100R ±1%	贴片电阻	R11, R16, R17, R18, R19, R48, R52, R59, R61, R63, R65, R67, R69	RESC1005(0402)S-N	Res-Chip_5	13
4.7K ±1%	贴片电阻	R12, R13, R14, R15, R54	RESC1005(0402)S-N	Res-Chip_4	5
150K ±1%	贴片电阻	R20, R25, R26, R29, R34, R37, R39, R42	RESC1005(0402)S-N	Res-Chip_13	8
1K ±1%	贴片电阻	R21, R22, R23, R24, R27, R28, R30, R31, R32, R33, R35, R36, R40, R41, R43, R44, R55, R56, R57, R58	RESC1005(0402)S-N	Res-Chip_6	20
15K ±1%	贴片电阻	R49	RESC1005(0402)S-N	Res-Chip_15	1
51K ±1%	贴片电阻	R50	RESC1005(0402)S-N	Res-Chip_14	1
4.7R ±1%	贴片电阻	R71, R73, R75, R77, R79, R81	RESC1608(0603)S-N	Res-Chip_16	6
2mR ±1%	贴片电阻	R83, R84, R85, R86	RESC6332(2512)S	Res-Chip_17	4
Header 4	Header, 6-Pin	Status	ZH1.5-6P-SH	Header 6	1
SP1N28STER	SP1N28STER	U1	SOP-8E	SP1N28STER	1
RY8121	18V 2A 1MHz Synchronous Step-Down Regulator	U2, U3	SOT-23-6	RY8121	2
COS8552SR	COS8552SR 二路通用运算放大器	U4, U5, U6	SOP-8	COS8552SR	3
AUIRS2181	AUIRS2181	U7, U8, U9	SOP-8	AUIRS2181	3